

**BOARD OF ENVIRONMENTAL REVIEW
AGENDA ITEM
EXECUTIVE SUMMARY FOR RULE INITIATION**

AGENDA # III.B.1.

AGENDA ITEM SUMMARY The Water Protection Bureau is proposing to amend ARM 17.30.702 Definitions and propose a new rule in sub-chapter 7 (nondegradation rules) pertaining to Criteria for Nutrient Reduction from Subsurface Wastewater Treatment System (SWTS).

LIST OF AFFECTED RULES This request to initiate rulemaking would amend ARM 17.30.702 and propose a new rule.

AFFECTED PARTIES SUMMARY The new rule will affect vendors/manufacturers of advanced wastewater treatment systems, and provide them with definite criteria for determining whether their wastewater systems meet the state's criteria for advanced treatment of nitrogen and other contaminants. This rule will also affect homeowners and business owners who need to use wastewater systems that reduce nitrogen in the effluent; it will most likely provide those people with more options when choosing an advanced wastewater treatment system. Increased options will hopefully also increase competition and reduce consumer costs.

SCOPE OF PROPOSED PROCEEDING The Department is requesting initiation of rulemaking and appointment of a hearing officer for a public hearing.

BACKGROUND Some subsurface wastewater treatment systems (SWTS) are designed to treat and remove nitrogen from the raw wastewater. The nondegradation rules at ARM 17.30.702(9) include a classification of SWTS that remove at least 60% of the nitrogen from the measured raw wastewater influent concentration. These systems are called level 2 SWTS. Level 2 SWTS are needed in certain situations to meet the nondegradation limits for nitrogen impacts to ground water (or surface water in some cases). The dilution calculation used to predict nitrogen concentrations at the end of a ground water mixing zone uses a lower effluent nitrogen concentration (24 mg/L) when the proposed SWTS is a level 2 system. Reducing the effluent nitrogen concentration in the mixing zone dilution equation to 24 mg/L (as compared to 50 mg/L for a SWTS that is not classified as level 2) increases the probability that the proposed SWTS will meet the nondegradation concentration limit at the end of the mixing zone. In addition, the nondegradation nitrogen concentration limit at the end of the mixing zone is higher for a level 2 SWTS (7.5 mg/L) than for SWTS that are not classified as level 2 (5 mg/L).

The current nondegradation rules and Department design circular DEQ-4 require that the level 2 classification for a SWTS be based upon the percent reduction of nitrogen as measured from raw influent. Due to the re-circulating design of many nitrogen-reducing SWTS, it is not possible to collect an untreated raw influent sample from the septic tank. Therefore, these systems cannot demonstrate the 60% nitrogen removal required because they cannot collect a raw wastewater sample while the SWTS is operating properly. To address this problem and to provide more guidance to developers and SWTS manufacturers/vendors regarding the amount of data needed to classify an SWTS as level 2, the Department has prepared draft rule language for addition to

the nondegradation rules.

The proposed rule includes several new provisions:

- Allows classification of SWTS as level 2 without requiring extensive monitoring of the influent wastewater quality (although at least one single raw influent sample is still required, and can be collected at the time of system start-up before the recirculation process begins);
- Allows third party verification (National Science Foundation) of the treatment capabilities;
- Creates two new classifications of nitrogen reducing SWTS. These classifications are termed level 1a and 1b. These classifications were created to provide credit to SWTS that reduce nitrogen more than a conventional SWTS (typically consisting of a septic tank and drainfield), but do not remove enough nitrogen to be considered level 2;
- Allows the classification of a SWTS as level 2, 1a or 1b based only on the effluent nitrogen concentration;
- Includes specific requirements where monitoring data is collected for the amount, frequency, time-frame, season, and climate;
- Requires a showing of the reliability of the SWTS and the authorized representative of the system; and
- Requires operation and maintenance contracts, scheduled inspections, and scheduled effluent monitoring for the life of the SWTS.

The proposed new rule was presented to WPCAC on November 6, 2003. WPCAC determined that the rules were acceptable to present to the Board.

HEARING INFORMATION The Department believes it is appropriate for the Board to appoint a hearing officer to conduct the hearing.

BOARD OPTIONS The Board may:

1. Initiate rulemaking, appoint a hearing officer, and schedule a hearing;
2. Determine that the adoption of rules is not appropriate and decline to initiate rulemaking; or
3. Direct the Department to modify the rulemaking and proceed.

DEQ RECOMMENDATION The Department recommends initiation of rulemaking and appointment of a hearing officer for a public hearing.

ENCLOSURES Executive Summary
Notice of Proposed rulemaking.